ABSTRACT

An integrated anastomosis tool both creates an opening in a side wall of a target blood vessel and performs an anastomosis procedure to connect a graft vessel to a side of the target blood vessel with a single integrated tool. The integrated anastomosis tool includes a cutting device, a graft vessel attachment device, an introducer, and a tool body. In each of the embodiments of the anastomosis tool, the advancement paths of a cutting device and a graft vessel attachment device cross, intersect, or align so that both the cutting device and the graft vessel attachment device can be operated by a single tool at the same intended anastomosis site in a sequential manner. The anastomosis procedure can be performed on a pressurized vessel since there is no need to interchange tools during the procedure.